

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-40. (CANCELED)

41. (CURRENTLY AMENDED) A recombinant vector, comprising:

a polynucleotide comprising a cis-acting central initiation region, which is the central polypurine tract ("cPPT"), and a cis-acting termination region, which is the central terminator sequence ("CTS"), wherein the cPPT and CTS are of the central polypurine tract ("cPPT") retroviral-like origin and derived from a retrotransposon;

a defined nucleotide sequence (transgene or sequence of interest);

and regulatory signals for reverse transcription, expression, and packaging, wherein said regulatory signals are of retroviral or retroviral-like origin.

42. (PREVIOUSLY PRESENTED) A recombinant vector according to claim 41, wherein the transgene or the sequence of interest is contained in an expression cassette comprising regulatory signals for transcription and expression.

43. (PREVIOUSLY PRESENTED) A recombinant vector according to claim 41, wherein the regulatory signals for reverse transcription, expression, and packaging, and the polynucleotide comprising the cPPT and CTS regions are derived from an HIV-type retrovirus.

44. (PREVIOUSLY PRESENTED) A recombinant vector according to claim 43, wherein the HIV-type retrovirus is HIV-1 or HIV-2.

45. (PREVIOUSLY PRESENTED) A recombinant vector according to claim 41, wherein the polynucleotide is a DNA sequence comprising the cis-acting central initiation region (cPPT) and the termination region (CTS) of an HIV-1 retroviral genome.

46. (CURRENTLY AMENDED) A recombinant vector according to claim 41, wherein the polynucleotide comprises the cPPT and CTS regions of a sequence ~~which may be selected from~~ SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, SEQ ID NO: 13, SEQ ID NO: 14, SEQ ID NO: 15, SEQ ID NO: 16, SEQ ID NO: 17, SEQ ID NO: 18, SEQ ID NO: 19, SEQ ID NO: 20, SEQ ID NO: 21, and SEQ ID NO: 33, or one of these sequences~~[[,]]~~ mutated by deletion or insertion of one or more nucleotides, provided that the polynucleotide permits the formation of a triplex on reverse transcription of the vector under the control of suitable regulatory elements.

47. (CURRENTLY AMENDED) A recombinant vector according to claim 41, wherein ~~[[the]]~~ gag, pol, and env sequences from an HIV retrovirus are provided by one or more additional vector(s) ~~are derived from sequences of an HIV retrovirus.~~

48. (CURRENTLY AMENDED): A recombinant vector according to claim ~~[[48]]~~ 47, wherein the HIV retrovirus is HIV-1 or HIV-2.

49. (CURRENTLY AMENDED): A recombinant vector according to claim 41, wherein ~~[[the]]~~ gag and pol sequences from an HIV retrovirus are provided by one or more additional vector(s) ~~are derived from the sequences of an HIV retrovirus and~~ ~~[[the]]~~ env sequence from a different HIV retrovirus or from a virus is provided by an additional vector ~~is derived from a different HIV retrovirus or from a virus.~~

50. (PREVIOUSLY PRESENTED) A recombinant vector according to claim 41, wherein the regulatory signals for reverse transcription, expression and packaging,

and the polynucleotide comprising the cPPT and CTS regions are derived from a yeast retrotransposon.

51. (PREVIOUSLY PRESENTED) A recombinant cell comprising a vector according to claim 41.

52. (WITHDRAWN) A method of *ex vivo* transfection or *ex vivo* transduction of non-mitotic differentiated cells, comprising transfecting or transducing the recombinant vector as claimed in claim 41 into non-mitotic differentiated cells.

53. (WITHDRAWN) A method of *ex vivo* transfection or *ex vivo* transduction of primary cells or immortalized cell lines, comprising transfecting or transducing the recombinant vector as claimed in claim 41 into primary cells or immortalized cell lines.

54. (WITHDRAWN) A polynucleotide comprising a nucleotide sequence of about 98 nucleotides, wherein said nucleotide sequence is from an HIV genome, wherein said nucleotide sequence is flanked on one side by a cis-acting central initiation nucleotide sequence (cPPT) comprising at least 10 nucleotides and on the other side by a cis-acting central termination nucleotide sequence (CTS) comprising at least 15 nucleotides, and wherein said polynucleotide comprises a segment of single-stranded or double-stranded polynucleotides.

55. (WITHDRAWN) A polynucleotide according to claim 54, wherein the HIV genome is an HIV-1 genome.

56. (WITHDRAWN) A method of *in vivo* transduction, comprising providing a recombinant vector or a polynucleotide as claimed in claim 41 and transducing the recombinant vector or a polynucleotide *in vivo*.

57. (WITHDRAWN) The method of claim 56, wherein the *in vivo* transduction further comprises injection of the recombinant vector or a polynucleotide into a tissue.

58. (WITHDRAWN) A polynucleotide according to claim 55 combined with a nucleotide sequence of interest or with a transgene.

59. (WITHDRAWN) A recombinant retroviral vector particle, comprising:

(a) a gag polypeptide corresponding to a nucleoprotein of a lentivirus, or to a functional polypeptide derivative (GAG polypeptide);

(b) a pol polypeptide constituted by the RT, PRO, and IN proteins of a lentivirus, or a functional polypeptide derivative (POL polypeptide);

(c) an envelope polypeptide or a functional polypeptide derivative (ENV polypeptide); and

(d) a recombinant nucleotide sequence, comprising:

a defined nucleotide sequence (transgene or a sequence of interest), placed under the control of regulatory signals for transcription and expression; a sequence containing regulatory signals for reverse transcription, expression, and packaging, wherein the regulatory signals are of lentiviral origin; and a polynucleotide comprising a cis-acting central initiation region (cPPT) and a cis-acting termination region (CTS) of lentiviral origin, inserted in a functional orientation with said regulatory signals of retroviral or retroviral-like origin.

60. (WITHDRAWN) A recombinant retroviral vector particle according to claim 59, wherein the regulatory signals for reverse transcription, expression, and packaging, and the polynucleotide comprising the cPPT and CTS regions are derived from an HIV-type retrovirus.

61. (WITHDRAWN) A recombinant vector according to claim 60, wherein the HIV-type retrovirus is HIV-1 or HIV-2.